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THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE PREVENTION
BACKGROUND INFORMATION AND TECHNICAL SUPPORT
FOR THE
PUBLIC HEARING
ON THE PROPOSED AMENDMENTS TO
310 CMR 7.00 Appendix A
FOR THE CONTROL OF AIR POLLUTION

IN THE
BERKSHIRE AIR POLLUTION CONTROL DISTRICT
PIONEER VALLEY AIR POLLUTION CONTROL DISTRICT
MERRIMACK VALLEY AIR POLLUTION CONTROL DISTRICT
METROPOLITAN BOSTON AIR POLLUTION CONTROL DISTRICT
CENTRAL MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT
SOUTHEASTERN MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT

REGULATORY AUTHORITY:
M.G.L. C. 111, SECTION 142A THROUGH 142M

DATE: December 1999

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Background

With the 1990 amendments to the federal Clean Air Act (CAA), Eastern and Western Massachusetts were designated as in “serious” non-attainment for the ozone National Ambient Air Quality Standard (NAAQS). For such non-attainment areas, the CAA requires “nonattainment New Source Review” (NSR)¹ of new major stationary sources and major modifications at major stationary sources of nonattainment pollutants. Since volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors to the formation of ozone, they are the pollutants regulated under nonattainment NSR. Massachusetts’s nonattainment NSR regulation (310 CMR 7.00 Appendix A), as originally adopted, applied to non-attainment areas only.

On June 9, EPA “revoked” the one-hour ozone NAAQS in Eastern Massachusetts, so that the term “nonattainment area” no longer applied in Eastern Massachusetts. Therefore, under state law, non-attainment NSR requirements no longer applied in Eastern Massachusetts, but they still applied in Western Massachusetts. It was anticipated that the new, more protective 8-hour NAAQS would have continued the Appendix A NSR requirements, but court action has placed this standard in abeyance².

The 1990 Amendments also added Section 184 to the CAA creating the Ozone Transport Region (OTR). Section 184 requires NSR throughout the entire OTR, regardless of whether an area meets the ozone standard. Therefore, after EPA “revoked” the one-hour NAAQS in Eastern Massachusetts, the OTR requirements still applied. The general OTR requirements are less protective than those required by the state in Eastern Massachusetts before revocation. The more protective state NSR requirements remained applicable in Western Massachusetts, as it is still an ozone non-attainment area.

On October 22, 1999 the Department filed an emergency regulation with the Secretary of State to amend Appendix A to require NSR for new major sources and major modifications for VOC and NOx throughout the state, regardless of attainment status under EPA rules. The emergency regulation will remain in effect for three months during which time the Department will hold a public hearing on the regulation and amend it if necessary.

These regulations apply to major stationary sources of air pollution (e.g. power plants, industrial/commercial boilers, and industrial processes) that emit NOx and/or VOC over their respective thresholds. The Department either currently has, or is expecting applications for, up to fifteen new electric generating facilities.

Summary of Proposed Amendments to Appendix A

The amendments propose to reinstate the nonattainment new source review (NSR) requirements in Eastern Massachusetts for emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx). This is accomplished by adding VOC and NOx to the list of pollutants regulated by 310 CMR 7.00 Appendix A.

The primary differences between the NSR requirements for serious non-attainment areas and those for the OTR are shown in the Table 1.

¹ NSR requires new major stationary sources and major modifications at major stationary sources of nonattainment pollutants to use Lowest Achievable Emissions Rate (“LAER”) technology and retire emissions offsets. LAER, generally, is the most stringent emission limit achieved in practice or the most stringent limit contained in any State Implementation Plan. Emissions offsets are additional reductions in actual emissions of the same pollutant obtained from the same source or different source(s) that were not otherwise required by a regulation or permit. In other words, the additional reduction was made voluntarily.

² On November 5, 1999, a proposed rule to rescind the revocation of the 1-hour ozone standard in Eastern Massachusetts was published in the Federal Register. The preamble for the proposal was published October 25, 1999 in the Federal Register.

Table 1.

REQUIREMENTS GOVERNING NONATTAINMENT
NEW SOURCE REVIEW REQUIREMENTS FOR OZONE
IN MASSACHUSETTS

Date	Pre-June 1999	Post-June 1999		Post-Appendix A	
Area Covered	Statewide	Western MA	Eastern MA	Western MA	Eastern MA
Rule Governing	Appendix A	Appendix A	CAA §184	Appendix A	Appendix A
Requirement	Serious Nonattainment Area	Serious Nonattainment Area	OTR	Serious Nonattainment Area	Equivalent to Serious Nonattainment Area
Major source threshold					
VOC	50 tons/yr (TPY)	50 TPY	50 TPY	50 TPY	50 TPY
NO _x	50 TPY	50 TPY	100 TPY	50 TPY	50 TPY
Major modification threshold					
VOC	25 TPY	25 TPY	25 TPY	25 TPY	25 TPY
NO _x	25 TPY	25 TPY	40 TPY	25 TPY	25 TPY
Required Emission Offset ratio	1.2:1	1.2:1	1.15:1	1.2:1	1.2:1

* Before adoption of the emergency regulation, the serious nonattainment requirements applied in Western Massachusetts and the OTR requirements applied in the rest of the Commonwealth. Previously, the serious nonattainment requirements were applied statewide. With the adoption of the emergency regulation, and as the Department is now proposing to finalize, the serious nonattainment requirements again apply statewide. When EPA reinstates the one-hour ozone standard, the entire state will be in serious nonattainment.

** NSR requires the affected source to retire more emissions than it will emit. An offset ratio of 1.2:1 means that 120 tons of actual emissions must be retired for each 100 tons of increased emissions from the new or modified stationary source.

Reasons for Amending the Regulations

The Department amended Appendix A as an emergency regulation and is now proposing to finalize the amendment in order to:

- Reduce uncertainty in the regulated community. For example, anyone currently reading Appendix A would not have a correct understanding of the regulatory requirements. Also, there are several places in other parts of 310 CMR 7.00 that reference Appendix A. With the amendments, these references again are meaningful.
- Satisfy federal requirements to have NSR requirements in the SIP.
- To strengthen and clarify the regulatory basis for acting on applications. Without amending the regulations, the Department could only incorporate the NSR requirements into the 7.02 comprehensive plan approval. (N.B. The CAA does clearly require NSR within the OTR.)

The emergency and proposed regulations include requirements equivalent to those for serious nonattainment areas, rather than the OTR (see Table 1. for a comparison), in order to:

- Provide uniform requirements across the state and provide a level playing field for the approximately 15 power plants seeking permits.
- Provide an opportunity for public comment for some projects that might not otherwise be subject to public comment.
- Be consistent with reinstatement of ozone nonattainment status in Eastern Massachusetts, as EPA proposed recently in the Federal Register. This avoids the “rules changing” on pending applications when EPA reinstates the standard.

If the Commonwealth is redesignated to attainment for the ozone standard, we must include a maintenance plan on how Massachusetts will continue to attain the ozone NAAQS. This must include accounting for future industrial growth.

Air Quality Impacts

Under the proposed amendments, the Department will continue to require NSR in Eastern Massachusetts. Since Appendix A requires the utilization of Lowest Achievable Emission Rate (LAER) and offsets, construction of new major stationary sources and major modifications at major stationary sources may proceed while still making progress in achieving the ozone standard.

Economic Impacts

The requirement to have a NSR program is contained in the CAA. These amendments simply reinstate the Appendix A requirements that were in effect since 1994. The resulting project cost is no different than would have been incurred before EPA revoked the one-hour ozone standard and after it rescinds the revocation.

Impacts on Cities and Towns, Proposition 2 1/2

Pursuant to Executive Order 145, DEP must assess the fiscal impact of new regulations on the state's municipalities. The Executive Order was issued in response to Proposition 2 1/2, MGL c. 29 s. 27C(a) which requires the state to reimburse municipalities for costs incurred as a consequence of new state laws and regulations.

The proposed regulation affects primarily industrial units. Since these amendments are not creating any new requirements, they do not impact the cities and towns.

Public Participation

As provided by law, the Department gives notice and provides the opportunity to review background and technical information at least 21 days prior to proposing the regulation amendment at a public hearing. To assure more notice adequate for processing a rule as an amendment to the SIP, formal notice will be issued 30 days before the public hearing is held in Boston. The hearing will be held in accordance with procedures of MGL Chapter 30A and the hearing record will remain open for two days after the close of the hearing in order to accept written comment. The hearing docket used to develop this rule is on file in the Division of Air Quality Control Office at one Winter Street, Boston and is available for review by interested parties.

MEPA

This proposed action is "categorically exempt" from the "Regulations Governing the Preparation of Environmental Impact Report" because the proposed regulation will not result in any increase in emissions. All reasonable measures have been taken to avoid or minimize adverse impacts.

CONTACT: For additional information please contact Donald Squires at Department of Environmental Protection, One Winter Street, Boston or at (617) 292 5618.

Copies of the Background Information and Technical Support document, proposed regulation and public notice is available on the DEP website at www.state.ma.us/dep.